UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,756	06/21/2006	Susan L. Giles	299.59	7141

7590 03/05/2009

Todd A Noah
Dergosits & Noah
Suite 1450
Four Embarcadero Center
San Francisco, CA 94111

EXAMINER	
CULLER, JILL E	

ART UNIT	PAPER NUMBER
2854	

MAIL DATE	DELIVERY MODE
03/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,756	GILES, SUSAN L.	
	Examiner	Art Unit	
	JILL E. CULLER	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 7, 8, 13, 14 and 20 are objected to because of the following informalities:

In claims 7 and 13, there is no antecedent basis for the recitation of "the consonant keys" as these claims depend from the independent claim. It appears that these claims may have instead been intended to depend from the previous claims as the recitation of a "third color" is also inconsistent with the claim as it is now written with no antecedent claim of other colors.

Similarly, in claims 8 and 14, the recitation of a "fourth color" is inconsistent with the claims as they each depend from an independent claim with not antecedent claim of other colors. This is the same for claim 20 and its recitation of a "third color".

Also, in claims 8 and 14, on line 4, it appears that the word "forth" should be "fourth" instead.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,452,960 to Kuhlenschmidt.

With respect to claim 1, Kuhlenschmidt teaches a computer keyboard comprising: a frame; a set of letter keys arranged in a QWERTY layout and mounted to an upper surface of the frame; a set of number keys arranged in a sequential and linear configuration parallel to the top row of the QWERTY layout and mounted to the upper surface of the frame; and a gap that separates the top row of QWERTY layout from the number keys. See Fig. 1.

With respect to claim 7, Kuhlenschmidt teaches that the number keys are a color that is distinct from the color of the consonant keys. See column 2, lines 41-46.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4, 9-11, 13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of U.S. Patent No. 6,919,879 to Griffin et al.

With respect to claim 2, Kuhlenschmidt teaches all that is claimed, as in the above rejection of claims 1 and 7, except for a mechanism for disabling a key repeat function for all letters and numbers.

Griffin et al. teaches a keyboard having a mechanism for disabling a key repeat function for all letters and numbers. See column 5, lines 45-65.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Kuhlenschmidt to have the disabling mechanism, as taught by Griffin et al., in order to adapt the response of the keyboard to the needs of the user.

With respect to claim 9, Kuhlenscmidt teaches a computer keyboard comprising: a frame; a set of letter keys arranged in a QWERTY layout and mounted to an upper surface of the frame; and a set of number keys arranged in a sequential and linear configuration parallel to the top row of the QWERTY layout and mounted to the upper surface of the frame. See Fig. 1.

Kuhlenschmidt does not teach a mechanism for disabling a key repeat function for all letters and numbers.

Griffin et al. teaches a keyboard having a mechanism for disabling a key repeat function for all letters and numbers. See column 5, lines 45-65.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Kuhlenschmidt to have the disabling mechanism, as taught by Griffin et al., in order to adapt the response of the keyboard to the needs of the user.

With respect to claim 13, Kuhlenschmidt teaches that the number keys are a color that is distinct from the color of the consonant keys. See column 2, lines 41-46

With respect to claim 15, Kuhlenschmidt teaches a computer keyboard comprising: a frame and a set of letter keys arranged in a QWERTY layout and mounted to an upper surface of the frame. See Fig. 1.

Kuhlenschmidt does not teach a mechanism for disabling a key repeat function for all letters and numbers.

Griffin et al. teaches a keyboard having a mechanism for disabling a key repeat function for all letters and numbers. See column 5, lines 45-65.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Kuhlenschmidt to have the disabling mechanism, as taught by Griffin et al., in order to adapt the response of the keyboard to the needs of the user.

With respect to claims 3-4, 10-11 and 16-17, Griffin et al. teaches a mechanism for disabling the key repeat function which could be considered both a firmware program stored in a first electronic memory in the frame of the computer keyboard and a software program stored in a second electronic memory in a computer associated with the computer keyboard and therefore it is considered to meet the requirements of all the claims.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of U.S. PGPUB 2003/0222800 to Uke

With respect to claim 5, Kuhlenschmidt teaches all that is claimed, as in the above rejection of claims 1 and 7, except for a first recess in which at least some of the set of letter keys are positioned; a second recess in which at least some of the set of number keys are positioned; and a drain that provides a path for liquids to flow from the recess out of the keyboard.

Uke teaches a keyboard having a first recess in which letter keys are positioned; a second recess in which at number keys are positioned; and a drain that provides a path for liquids to flow from the recess out of the keyboard. See paragraphs 74-77 and Fig. 25 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Kuhlenschmidt to have recesses and a drain, as taught by Uke, in order to protect the keyboard from spilled liquids.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of U.S. Patent No. 6,084,576 to Leu et al.

With respect to claim 6, Kuhlenschmidt teaches all that is claimed, as in the above rejection of claims 1 and 7, except that the set of letter keys have vowel keys that are a first color and consonant keys which are a second color.

Leu et al. teaches a keyboard wherein the vowel keys are a first color and the consonant keys are a second color. See column 29, line 58 - column 30, line 28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the keyboard of Kuhlenschmidt to have colored keys, as taught by Leu et al. in order to help the user in distinguishing between the types of keys.

With respect to claim 8, Kuhlenschmidt teaches all that is claimed, as in the above rejection of claims 1 and 7, except for a shift key having text in a fourth color printed on a surface of the shift key; wherein the number keys each have a symbol in the fourth color printed on a surface of the number keys.

Leu et al. teaches keys having text printed in color on the surface of the keys. See column 29, line 58 - column 30, line 28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the keyboard of Kuhlenschmidt to have colored key text, as taught by Leu et al. in order to help the user in distinguishing between the types of keys.

Claims 12, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of Griffin et al. as applied to claims 2-4, 9-11, 13 and 15-17 above, and further in view of Leu et al.

With respect to claim 12, Kuhlenschmidt and Griffin et al. teach all that is claimed, as in the above rejection of claims 1 and 7, except that the set of letter keys have vowel keys that are a first color and consonant keys which are a second color.

Leu et al. teaches a keyboard wherein the vowel keys are a first color and the consonant keys are a second color. See column 29, line 58 - column 30, line 28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the keyboard of Kuhlenschmidt to have colored keys, as taught by Leu et al. in order to help the user in distinguishing between the types of keys.

With respect to claim 14, Kuhlenschmidt and Griffin et al. teach all that is claimed, as in the above rejection of claims 1 and 7, except for a shift key having text in a fourth color printed on a surface of the shift key; wherein the number keys each have a symbol in the fourth color printed on a surface of the number keys.

Leu et al. teaches keys having text printed in color on the surface of the keys. See column 29, line 58 - column 30, line 28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the keyboard of Kuhlenschmidt to have colored key text, as taught by Leu et al. in order to help the user in distinguishing between the types of keys.

With respect to claim 20, Kuhlenschmidt and Griffin et al. teach all that is claimed, as in the above rejection of claims 1 and 7, except for a shift key having text in a fourth color printed on a surface of the shift key; wherein the number keys each have a symbol in the fourth color printed on a surface of the number keys.

Leu et al. teaches keys having text printed in color on the surface of the keys. See column 29, line 58 - column 30, line 28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the keyboard of Kuhlenschmidt to have colored key text, as taught by Leu et al. in order to help the user in distinguishing between the types of keys.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of Griffin et al. as applied to claims 2-4, 9-11, 13 and 15-17 above, and further in view of U.S. Patent No. 5,936,554 to Stanek

With respect to claim 18, Kuhlenschmidt and Griffin et al. teach all that is claimed, as in the above rejection of claims 2-4, 9-11, 13 and 15-17, except for a USB

type connector which allows the computer keyboard to be used as a secondary keyboard for a computer.

Stanek teaches a keyboard having a USB type connector. See column 4, line 62 - column 5, line 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the keyboard of Kuhlenschmidt to have a USB connector, as taught by Stanke, in order to allow bidirectional communication between the keyboard and a computer.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhlenschmidt in view of Griffin et al. as applied to claims 2-4, 9-11, 13 and 15-17 above, and further in view of Uke.

With respect to claim 19, Kuhlenschmidt teaches all that is claimed, as in the above rejection of claims 2-4, 9-11, 13 and 15-17, except for a first recess in which at least some of the set of letter keys are positioned; a second recess in which at least some of the set of number keys are positioned; and a drain that provides a path for liquids to flow from the recess out of the keyboard.

Uke teaches a keyboard having a first recess in which letter keys are positioned; a second recess in which at number keys are positioned; and a drain that provides a path for liquids to flow from the recess out of the keyboard. See paragraphs 74-77 and Fig. 25 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Kuhlenschmidt to have recesses and a drain, as taught by Uke, in order to protect the keyboard from spilled liquids.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JILL E. CULLER whose telephone number is (571)272-2159. The examiner can normally be reached on M-F 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jec

/Jill E. Culler/
Primary Examiner, Art Unit 2854